

REMARKS

Enclosed herewith are new, formal drawings in order to overcome the Examiner's objections to the drawings.

The description and the claims have also been amended with a view to overcoming the formal objections thereto.

Furthermore, claim 1 has been amended so as to more clearly distinguish the arrangement according to the invention from the cited prior art.

The Examiner has rejected claims 1 - 3 and 6- 10 under 35 USC 102(b) as being anticipated by Satou (US 5 301 639), he has rejected claim 4 under 35 USC 103(a) as being unpatentable over Satou in view of Uchida and he has rejected claim 5 under 35 USC 103(a) as being obvious from Satou.

Satou (US 5 301 639) discloses valve timing control device for an internal combustion engine with a rotational phase adjustment structure mounted to the cylinder head 9 in a housing 11. The housing 11 includes also the valve 17 for controlling the oil flow to the adjustment mechanism. The housing 11 is mounted axially over the axial end of the camshaft 1 and includes an annular cylinder space 6 with a piston 7 with helical splines 7b engaged with external helical splines 3c of a camshaft sleeve and helical splines 7c for rotating the camshaft 1 upon actuation of the piston 7 relative to the drive sprocket wheel 2. The camshaft bearings are not shown in the drawings as they are of no importance in the camshaft adjustment arrangement according to Satou.

Uchida (US 6 032 629) discloses a variable valve timing arrangement with a mechanism operated hydraulically by engine lubricating oil supplied through control passages formed in the base of the forward-most bearing of the camshafts. Valves 63 are mounted in the bearing bases for controlling the supply of oil to, and its release from, the valve timing mechanism. (See particularly Figs. 2, 4, description -column 4, lines 43-49).

The present invention also relates to a drive for changing the angle of rotation of a camshaft 3 arranged in a cylinder head 1 of an internal combustion engine relative to a drive wheel 14 of the engine. The hydraulic adjusting arrangement 15, which is effective between

the drive wheel 16 and the camshaft, is supplied with an operating fluid under the control of an on/off valve which is mounted on a camshaft bearing cover.

Fluid passages for supplying fluid to the hydraulic camshaft adjusting arrangement and releasing it therefrom under the control of the on/off valve 5 are also arranged in the camshaft bearing cover.

Since the bearing cover is a relatively small part, the manufacture thereof with all the flow passages is relatively simple and costs are greatly reduced. Furthermore, in case of failure of the valve or any blockages in the passages, the bearing cover can simply be replaced together with the control valve.

Such an arrangement as now distinctly defined in amended claim 1 (by inclusion of the subject matter of claim 3 in claim 1) is not disclosed in any of the cited references so that the invention as defined in claim 1 is clearly novel.

Reconsideration of the rejection of claim 1 under 35 USC 102 is respectfully requested.

Furthermore, since none of the references discloses an arrangement in which all -or for that matter, any- of the control components for the operation of angular adjustment mechanism for the camshaft are disposed in the cover of a camshaft bearing, it can hardly be said credibly that the arrangement as defined in claim 1 is obvious from the cited references.

Claims 6 and 7 relate to particular features of the arrangement defined in claim 1. They are both dependent on claim 1 and therefore include also all the features of claim so that they should be patentable together with claim 1.

Reconsideration of these claims and allowance of claims 1, 6 and 7 is solicited.

Respectfully submitted,



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